

The only feature cited by Pierce that separates these two forms is the tricarinate vs. bicarinate rostrum. The other differences cited in pattern and sculpture concern characteristics that are notoriously variable in the genus. Therefore a closer look at the rostral carinae is of considerable importance in assessing the degree of relationship. Pierce says of *bicarinatus*, "the rostral carinae are close together and very prominent, with no room for a median carina between them as in *fasciatus*." Despite this statement, his type has a median carina which, although poorly developed, is perfectly visible at the rostral base. Of *fasciatus* he says, "the specimen at hand which most nearly answers the description of this species . . . has . . . two distinct rostral carinae with a less distinct median basal carina." The only difference is one of degree, Pierce's type having higher and closer lateral carinae and a more obscure median one. As a series of *fasciatus* demonstrates the variability of rostral sculpture, it is best to consider *bicarinatus* a synonym representing one extreme of this variability. Pierce's type is from Tenino, Washington; *fasciatus* occurs throughout the Pacific Northwest, specimens having been seen from Washington, Oregon, Idaho, and Utah, as well as eastern United States.

REVIEW

The Zoology of Iceland. Volume III, Part 46. Coleoptera 1. Synopsis. by SVEN GISLE LARSSON and GEIR GIGJA. 218 pp., 10 figs. 1952. 2. **General Remarks.** by SVEN GISLE LARSSON. 85 pp., 13 figs. 1959.

The beetle fauna of Iceland consists of 160 species plus 40 species based on adventitious introductions not likely to be established and 7 species whose records are open to doubt. Not one of the 160 established species is peculiar or even subspecifically peculiar to the Iceland fauna, but all occur in northwestern Europe and establish Iceland as a definite part of the Palaearctic region. 78 or 49 percent of the established species are considered by Larsson as indigenous, i.e., as being established in the island before man's advent. Larsson suggests that these indigenous species are the remnants of a Pre-Glacial or even an Oligocene fauna, that arrived in Iceland when the water barriers were much narrower than at present or even non-existent. They sur-

vived the not quite complete glaciation of the country in numerous small refugia, the possible existence of which is considered in some detail. The species introduced by man constitute several categories: 35 species associated with the rural culture, 8 species associated with stables, 5 species associated with human abodes, 19 species associated with stored products, and 14 species associated with horticulture. Several of the adventitious species, the author suggests, are possible candidates for introduction if and when portions of the country are reforested.

The four principal families in the established fauna are Staphylinidae, 59 species (31 indigenous); Carabidae, 19 species (17 indigenous); Curculionidae, 15 species (13 indigenous); Cryptophagidae, 13 species (none indigeneous).

The bulk of the book consists of a carefully prepared annotated list containing: (1) a reference to a recent description, (2) Iceland bibliography, (3) Iceland distribution, (4) general distribution, and (5) biology and remarks. MELVILLE H. HATCH, *University of Washington, Seattle.*